



Federal Transit Administration

Transit Service & Fare Equity Analysis

Under Title VI of the Civil Rights Act

Training Overview for FTA Regions

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Logistics

- Introductions
- Please silence your cell phones
- Handout: FTA Circular 4202.1A,
“Title VI Guidelines for FTA Recipients”

http://www.fta.dot.gov/documents/Title_VI_Circular_4702.1A.pdf



Title VI Overview



Title VI

1

- “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal Financial assistance.”

2

3

4



42 U.S.C 2000d, et seq₄





Title VI Applies to “Persons”

- Title VI Protections are *not* limited to citizens.
- Individuals may file a complaint if they are an intended beneficiary of, an applicant for, or a participant in a Federally assisted program.





Race, Color, & National Origin are three 'protected classes'

- **Race**
 - U.S. Census categories define race
 - Persons of any race are protected classes
- **Color**
 - Discrimination based on skin color or complexion is prohibited
- **National Origin**
 - Foreign born ancestry



Program or Activity

Applies institution-wide

- Title VI applies institution-wide, *not* solely limited to primary recipients operations
- Examples?



Title VI applies to both Recipeints & Sub-recipeints

- **Recipient:**

- State DOT
- Transit Agency
- Or any public or private agency, institution, department or other organizational unit receiving funding from FTA



- **Sub-recipient:**

- any entity that receives FTA financial assistance as a pass-through from another entity

FTA Direct Grant Recipients meet their Title VI Obligations thru The Circular

- Ensure FTA programs, policies and activities do *not* discriminate on race, color, or national origin
- Addresses requirements of FTA Title VI Circular 4702.1A,
 - AKA “The Circular”
- Submission Recurrence
 - Recipients every 3 years
 - MPOs every 4 yrs

http://www.fta.dot.gov/documents/Title_VI_Circular_4702.1A.pdf



U.S. Department
of Transportation

Federal Transit
Administration



CIRCULAR

FTA C 4702.1A

May 13, 2007

Subject: TITLE VI AND TITLE VI-DEPENDENT GUIDELINES FOR FEDERAL TRANSIT ADMINISTRATION RECIPIENTS

1. PURPOSE. The purpose of this circular is to provide recipients and subrecipients of Federal Transit Administration (FTA) financial assistance with guidance and instructions necessary to carry out the U.S. Department of Transportation's ("DOT" or the "Department") Title VI regulations (49 CFR part 21) and to integrate into their programs

Discrimination Prohibitions

- **Disparate Treatment**

- **Intentional Discrimination**

- Actions that result in circumstances where similarly situated persons are treated different because of their race, color, or national origin.

- **Disparate Impact**

- **Unintentional Discrimination**

- The recipient's procedure or practice while neutral on its face has the effect of disproportionately excluding or adversely affecting members of the projected class without substantial legitimate justification.



Service & Fare Equity Analysis

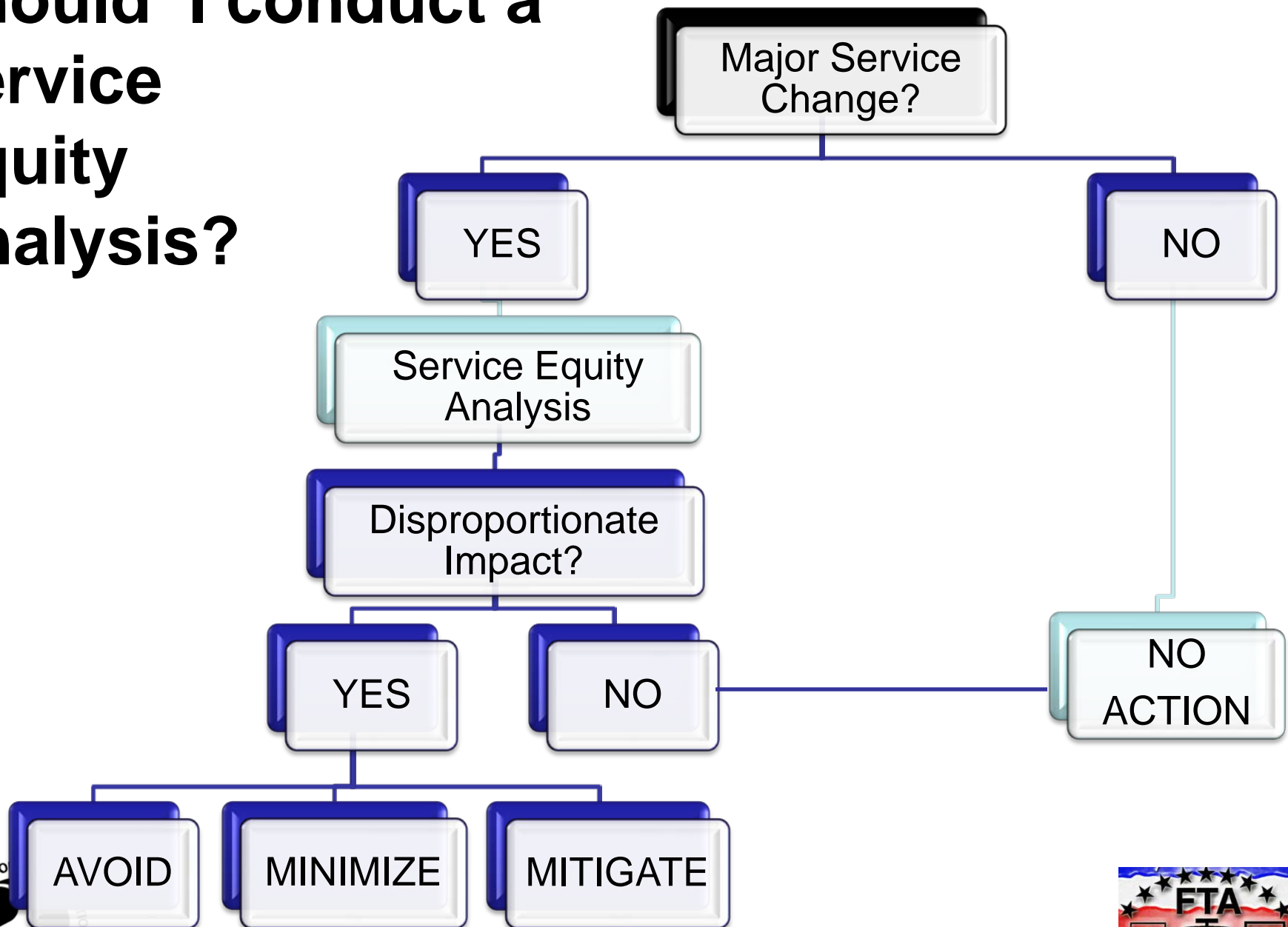


Service & Fare Equity Analysis Goals

- Assess the effects of the proposed fare or service changes.
- Assess the alternatives available for people affected by change.
- Determine if proposals would have a disproportionately high and adverse effect on minority and low-income riders.
- Describe the actions proposes to minimize, mitigate, or offset any adverse effects



Should I conduct a Service Equity Analysis?



Service & Fare Change

- When: Conducted at programming stages
- Who: Urbanized area over 200,000 who proposes major service change or fare change
(Note: No threshold for fare changes)
- Why: Required by FTA Circular 4702.1A



Defining a Major Service Change



Establishing a Major Service Change Policy

- Recipient should have established guidelines or **threshold** for what it considers “major” change to be
- Often defined as a numerical standard
 - e.g. change effects greater than 25% of service hours on any route



Example of a Major Service Change

- Change of 50% or more in revenue-miles on any individual route
 - Example: During a single fiscal year, changes made on a route exceeds 50% of revenue-miles
- Elimination of a route or a portion of a route results in an area having no alternative service within one-quarter of a mile
- A new transit route is created
- **A fare increase or decrease of any amount is proposed**



THE CITY OF USA

“Major Service Change” Policy

Policy 551

“Title VI analysis must occur whenever there is a service adjustment of 25% or more in daily route miles or hours”.

- Analysis should:
 - 1) Determine benefits to and potential negative impacts on minority & low-income populations
 - 2) Quantify expected effects
 - Total, positive, and negative (disproportionately high and adverse effects)
 - 3) Determine the appropriate course of action, whether avoidance, minimization, or mitigation.



THE CITY OF USA


“Major Service Change” Resolution

The Board requires a **public hearing** for any system-wide service changes affecting **5% or more** of revenue **miles** or **hours**.



Service Change Analysis





Option A: Prescriptive Method

Create Maps

Span of Service, Modes


Assess Alternatives

Travel Time, Cost

Determine if disproportionate
impact

Mitigate

Option B: Create your own method



Evaluate changes
during planning

Explain your own
methodology

Determine if
disproportionate impact

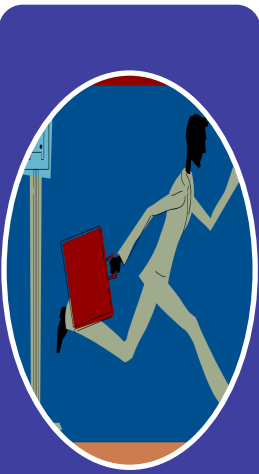
Identify Alternatives &
Mitigate

SERVICE & FARE EQUITY ANALYSIS

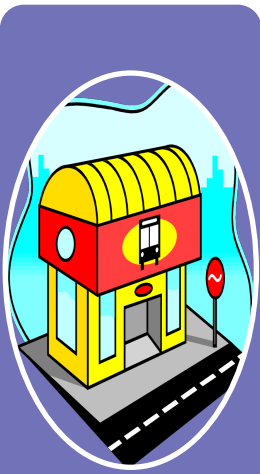
Measurable Attributes



Headway



Span-of-Service



Route
Elimination



Vehicle
Type



Load
Factor



Cost



Location



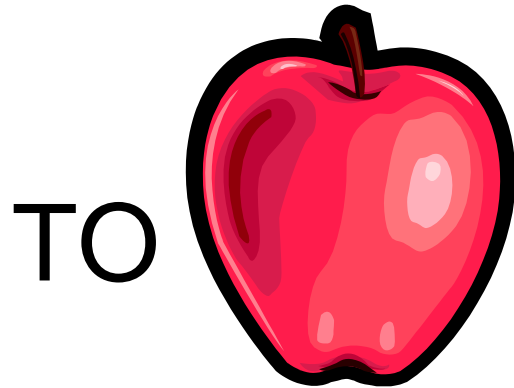
What does the circular not say?

- Type of data needed
 - Have O&D data, US Decennial Census, or Attitude and Awareness Survey data with cross tabulation by ethnicity.
- Human Resources:
 - Planners conduct analysis
 - Market Research conduct analysis
- Measure disparate impact
 - Planning method that measures impact
 - Minority route definition



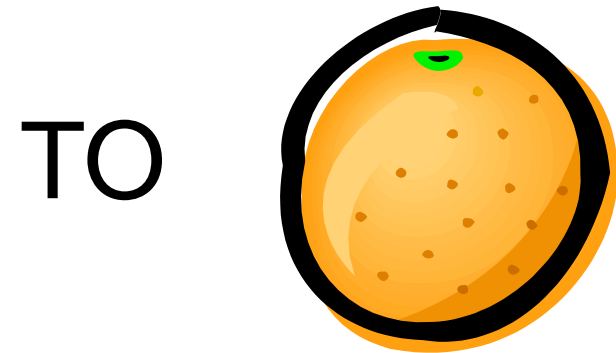
Golden Rule for Preparing Service Equity Analysis

APPLES



APPLES

ORANGES

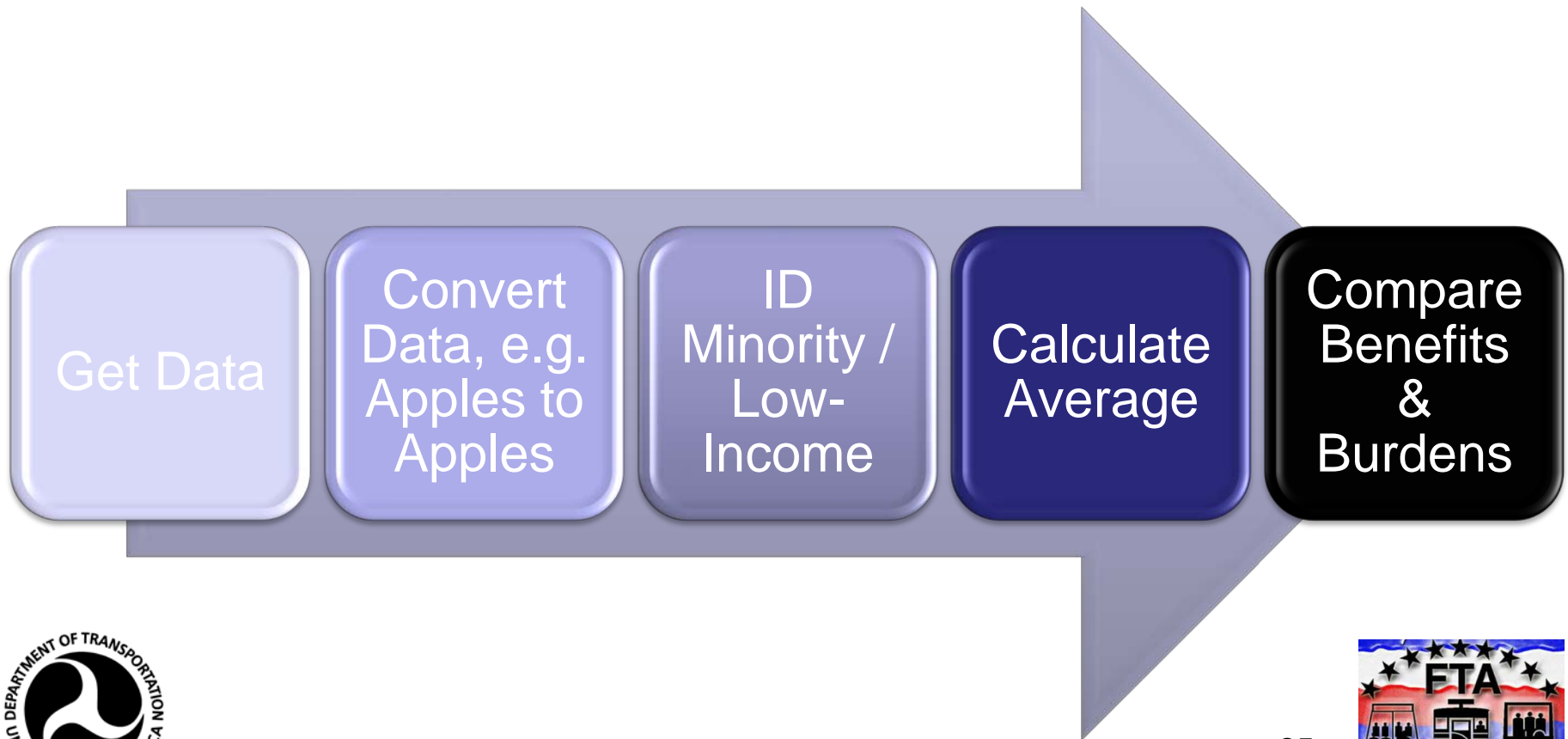


ORANGES

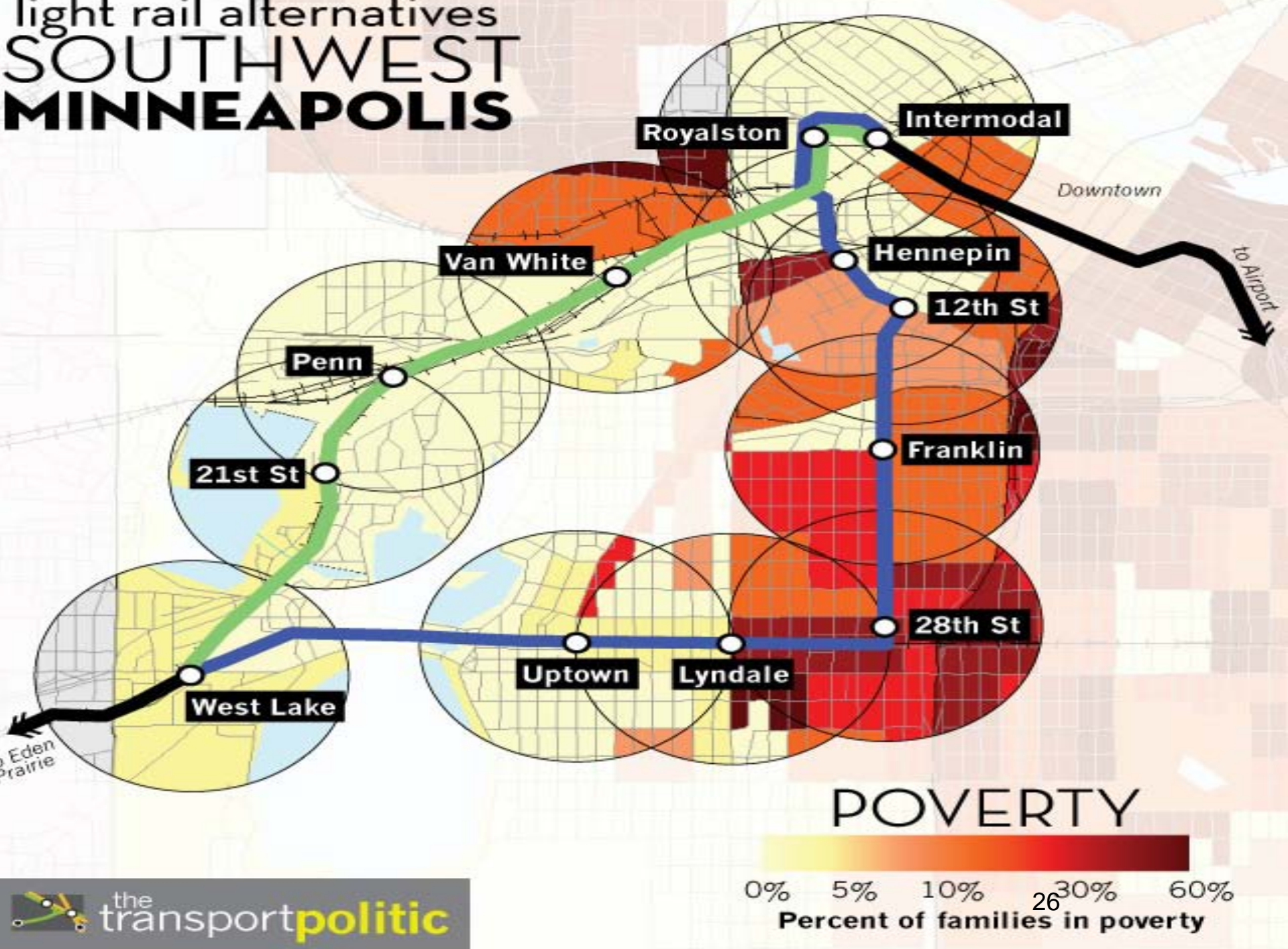
SERVICE &

FARE EQUITY ANALYSIS

Customary Steps



light rail alternatives SOUTHWEST MINNEAPOLIS



Case Study # 1

Title VI Review - April 2010 Servi

Operating Costs and Ridership
Weekdays

Minority
Route

*

Serv

Previous Route Name	New Route Name Brief Overview	Span of Service	
		Start	End
61C McKeesport-Homestead	61C McKeesport-Homestead		
Existing	Headway changes, variants reduced	3:53	25:52
Proposed: Existing 61C Riders		4:00	25:00
Proposed: Shift from 61F		4:00	25:00
Proposed: Total		4:00	25:00
61D Summerset	61D Murray Ave		
Existing	Removed from Summerset, extended to	6:17	22:17
Proposed	Waterfront.	5:00	26:00
61F Homestead Park			
Existing	Service eliminated, see 61D & 55M	7:23	17:45
Proposed			
64A East Liberty Homestead	64 Lawrenceville-Homestead		
Existing	Route extended to Childrens Hospital	5:24	24:35
Proposed		5:30	24:30
69A Forbes			
Existing	Service eliminated , see 61A	8:24	21:56
Proposed			

Case Study continued

Non Minority Routes

	Average Weekday Headway	SAT	SUN
1 Freeport Road	0.63	1.00	1.00
5 Natrona	1.33	2.00	
14 Ohio Valley	0.50	1.00	1.25
21 Coraopolis	0.67	1.00	2.00
20 Kennedy	0.68		
24 West Park	0.63	1.00	1.00
22 McCoy	0.75	1.00	
32 Campbells Run	0.75		
28X Airport Flyer	0.50	0.50	0.50
G1 West Busway	0.30	0.50	1.00
61D Murray Ave	0.38	0.50	0.75
75 Ellsworth	0.40	0.58	0.58
G2 West Busway-Oakland	0.38	1.00	1.00
P10 Allegheny Valley Flyer	0.33		
P11 Middle Road	0.67		
Red Line	0.27	0.30	0.38
Blue Line via Library	0.35	0.70	0.70
Blue - South Hills Village	0.35	0.35	0.70

	0.55	0.80	0.87
Minutes	33	48	52
Hours	0	0	0

Minority Routes

	Average Weekday Headway	SAT	SUN
16 Brighton	0.32	0.50	0.50
18 Manchester	0.32	1.00	1.00
P7 McKeesport Flyer	0.75		
59 Mon Valley	0.63	1.00	1.00
60 Walnut-Crawford Village	1.00		
61 White Oak	1.00		
62 Liberty - North Versailles	1.00	1.00	
61A East Pgh-Wilkinsburg	0.38	0.50	0.75
61B Braddock-Swissvale	0.38	0.50	0.75
61C McKeesport-Homestead	0.38	0.50	0.75
64 Lawrenceville-Homestead	0.50	0.50	1.00
19L Emsworth Limited	0.25		
Brown Line	0.75		

	0.59	0.68	0.78
Minutes	35	41	47
Hours	0	0	0

Case Study continued

Minority Routes Eliminated

55D West Run-Brierly Lane	1.22	13.74
58P Port Vue-Liberty	1.13	12.18
58V Versailles Express	0.82	11.78
59U South Side Works-		
Oakland	0.60	15.52
77C Shadyside	2.00	9.53
78C Shadyside Express	1.38	9.53
T Trafford Flyer	2.75	10.70



Case Study # 2

Impact of Potential 2008 Service Adjustments on Minority and Low Income Passengers

Weekly Numbers

Bus/Rail Lines	Wkly Ons	Under20k	Minority	%<20k	% Min	Impacted Ons	Under20k	Minority
1	50,340	25,081	21,602	50%	43%	1,453	724	624
2	56,929	20,727	10,639	36%	19%	4,623	1,683	864
3	39,479	15,902	7,414	40%	19%	2,396	965	450
4	18,396	7,309	4,509	40%	25%	688	273	169
	52,845	21,450	13,172	41%	25%	1,572	638	392
	952	446	248	47%	26%	237	111	62
	4,562	679	2,012	15%	44%	659	98	291
	1,781	455	414	26%	23%	280	71	65
	13,596	4,177	4,093	31%	30%	1,161	357	349
	6,294	3,264	3,079	52%	49%	0	0	0
	19,346	7,186	4,965	37%	26%	1,014	377	260
	65,337	33,005	22,653	51%	35%	998	402	187
	19,406	7,565	3,864	39%	20%	378	150	93
	21,728	7,379	4,359	34%	20%	931	378	232
Adj Lines	370,990	154,623	103,022	42%	28%	16,390	6,228	4,037
Bus/Rail Lines	Wkly Ons	Under20k	Minority	%<20k	% Min			
Freq Lines	598,763	262,001	178,979	44%	30%		38%	25%
All Bus Lines	1,266,568	527,728	381,169	42%	30%			
Rail Lines	618,897	179,793	163,547	29%	26%			

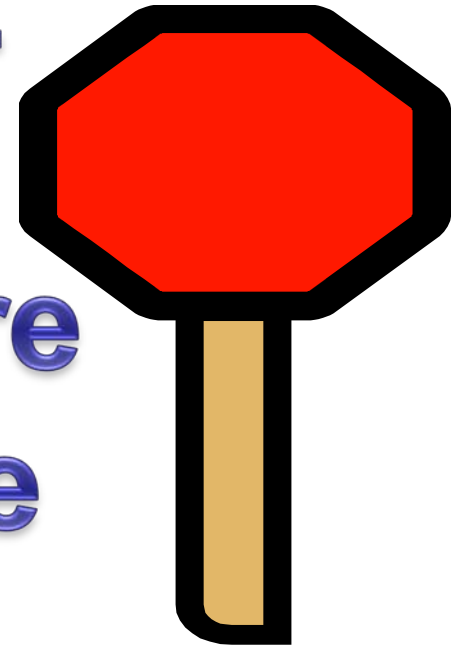
* Weekly Ridership from LATEST O&D Data

* % Minority & Under 20 k from LATEST O&D Survey

Fare Changes

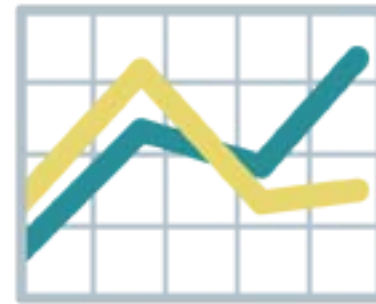


**A FARE ANALYSIS is
required for ALL
CHANGES,
Regardless if there
is a major service
change or NOT!**



Perform a Fare Analysis

- Assess effects of proposed fare change
- Examine *ALL* fare increase or decrease
- Analyze if minority & low-income riders are more likely to use the:
 - mode of service,
 - payment type, or
 - payment media
 - subject to the fare increase



Disproportionate fare increases okay if no feasible alternative

*“Recipients can implement a fare increase or major service reduction that would have disproportionately high and adverse effects provided that the recipient demonstrates that the action meets a substantial need that is in the public interest and that alternatives would have more severe adverse effects than the preferred alternative.”**

*Circular 4702.1A, Title VI Guidelines for FTA Recipients



Can a fare equity analysis be performed on this data?

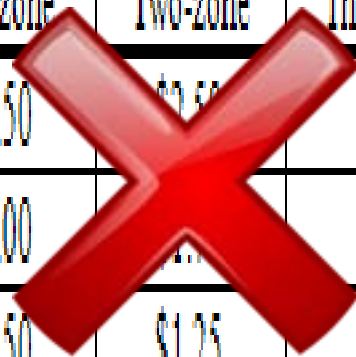
Current Fares	One-zone	Two-zone	Three-zone
Adult	\$1.50	\$2.50	\$3.00
Youth	\$1.00	\$1.75	\$2.50
Senior/Disabled	\$0.50	\$1.25	\$1.50

June, 2011	In-county	Intercounty
Adult	\$2.50	\$3.50
Youth	\$1.25 (bus & Link)	\$2.50
Senior/Disabled	\$0.75 (bus & Link)	\$1.50



No, because we need minority & low-income populations identified

Current Fares	One-zone	Two-zone	Three-zone
Adult	\$1.50	\$2.50	\$3.00
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	Non-minority		Minority	
Adult	1	2	1	2
Youth				
Senior/Disabled		36		

2008 Customer Satisfaction Survey (Systemwide)

Weekday

Ethnicity by Fare Type

Weighted by originating rides

Fare Increase

Count	Ethnicity	
	Non-minority	Minority
Fare type		
FR Cash	149,131	302,021
FR Day Metro Pass	158,451	290,456
Express Bus Cash	5,198	1,047
Express Bus Day Pass	2,166	1,047
Rail Cash 1-Zone		
Rail Cash 2-Zone		
Rail 1-Zone Day Pass		
Rail 2-Zone Day Pass		
Cash Single Ride Student		
Seniors	28,395	17,681
Disability Fare card	9,321	29,280
Active Duty/Military		
Disability Fare Card (ADA certified)	9,321	9,321
Dillo		
STS		
Adult 31 31-Day R Pass	335,544	511,225
Student 31-Day R Pass	130,489	192,661
Adult 7-Day R Pass		
Child 7-Day R Pass		

Example Fare Data

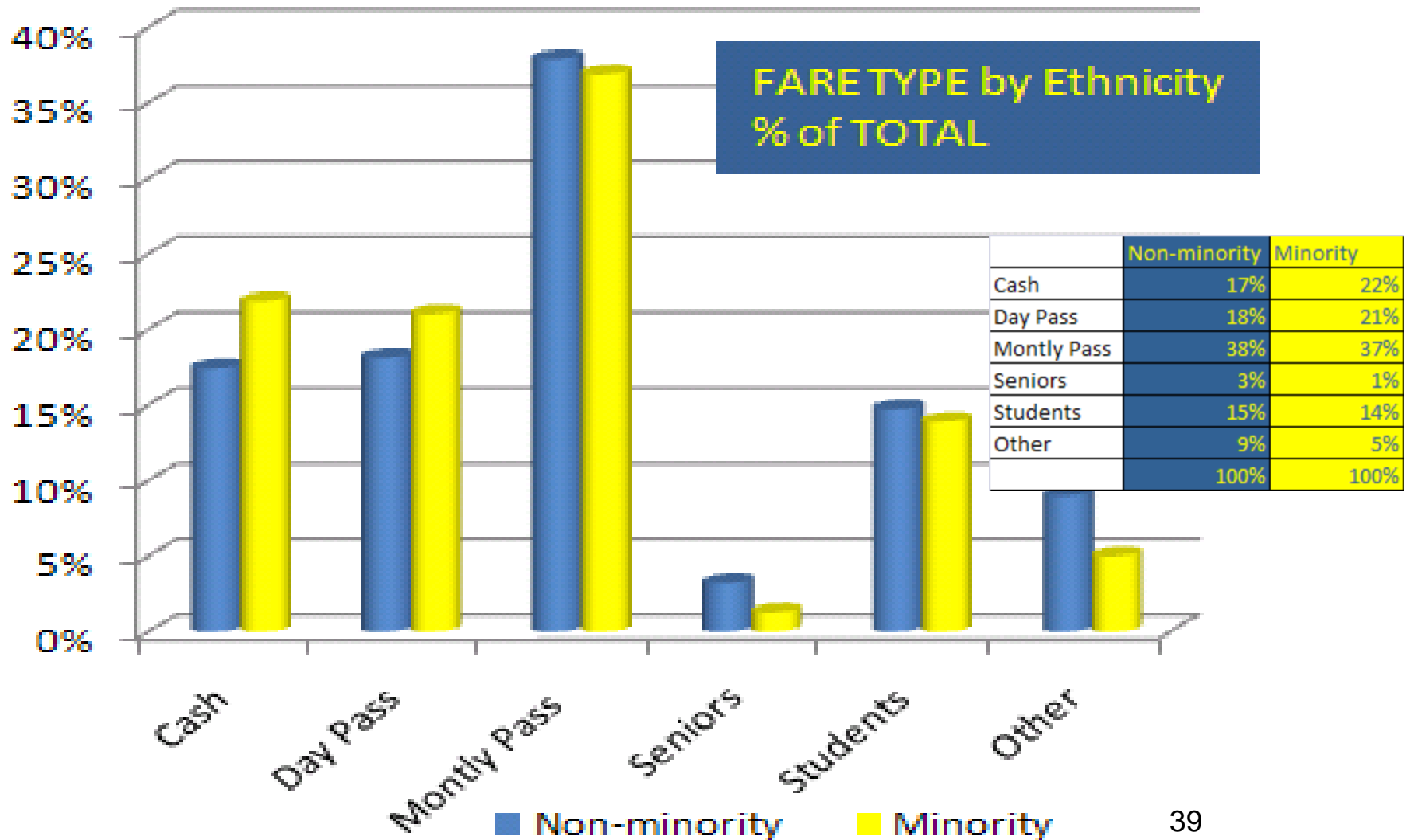
Is there a disparate impact?

Fare Type	NonMin	Minority	Cost/Ride
Cash 1-ride	149,131	302,021	\$1.00
Day Pass	158,451	290,456	\$1.25
Monthly Pass	511,225	355,544	\$0.75
TOTAL	686,930	1,122,250	



Recommendation:

Identify Fare Type by Ethnicity



Compare & Mitigate Proposed Fare Changes

- Analysis should **compare** the fares paid under the change with fares that would be paid through available alternatives
- Describe actions to avoid, minimize, or **mitigate** any adverse effects of proposed fare changes on minority and low-income populations



Remember to MITIGATE!

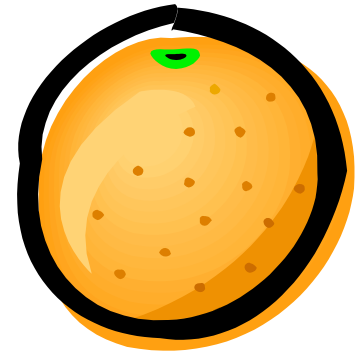
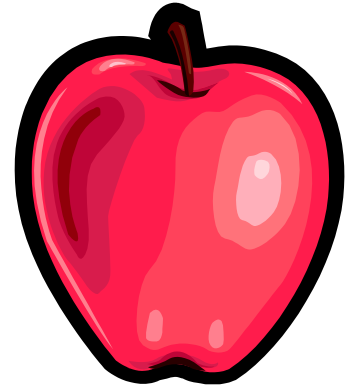
- ✓ Determine if any proposals would have a disproportionately high and adverse effect
- ✓ Describe actions to mitigate



Service & Fare Equity Analysis

Summary Points

- ☐ Evaluate changes during **planning**
- ☐ Determine if discriminatory impact
- ☐ Compare “apples-to-apples”
- ☐ Explain methodology
- ☐ Use graphics
- ☐ Describe actions to **mitigate**



Remember! Compare **Apples to Apples,
Oranges to Oranges**





Thank you!! 问题

tanong

Questions

질문

¿Preguntas?



pergunta

Domanda?

Pitanje

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ερώτηση

kesyon

ΒΟΗΡΟCΥ



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